

MODIS  
September 24, 2006

CBCnews

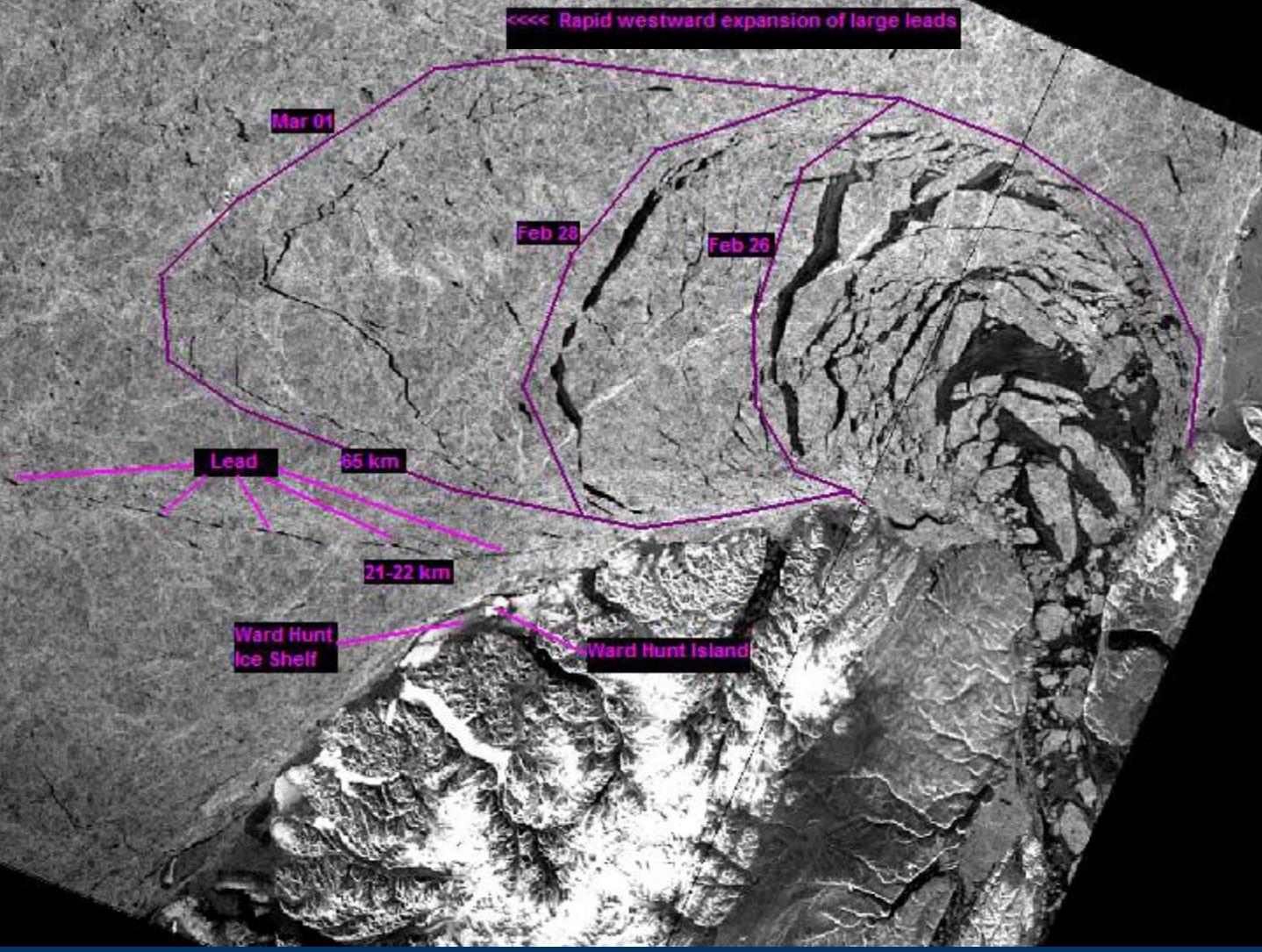
CANADA | NORTH

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## Lack of ice in Northwest Passage stuns researchers

Last Updated: Tuesday, October 31, 2006 | 9:52 AM CT  
CBC News

# More Recent Events

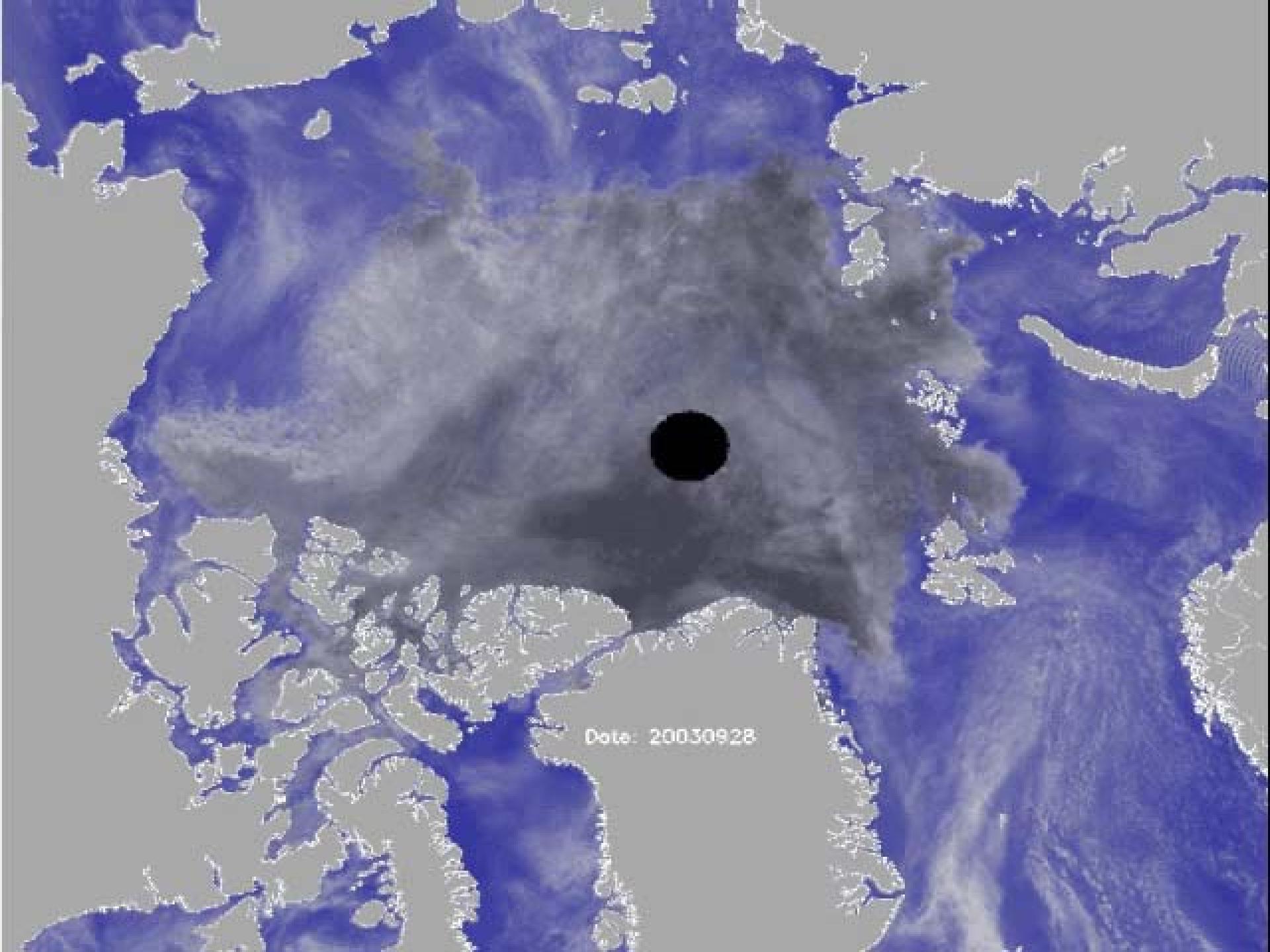


# **“EXTREME ICE”**

**“Crushing ice imprisons sealing ships  
Coast Guard pushing hard to aid 100 trapped  
vessels, including one of their own”**

**Supplies low for ice-bound N.L. sealers  
Thursday, April 19, 2007**

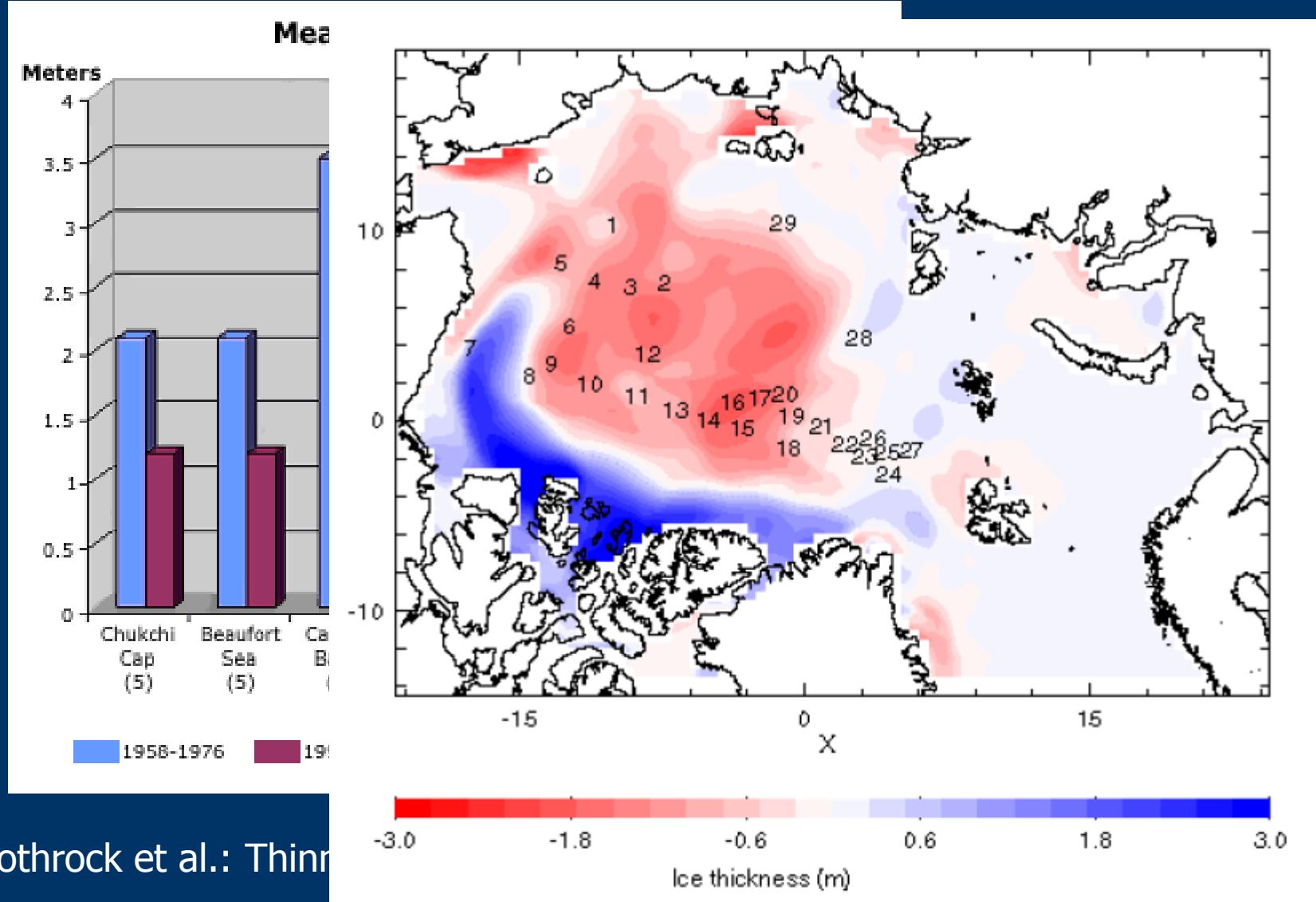




A satellite image showing a coastal region with various landmasses and water bodies. A prominent feature is a large, solid black circle located in the center of a dark, textured area. In the bottom right quadrant, there is a white rectangular box containing the text "Date: 20030928".

Date: 20030928

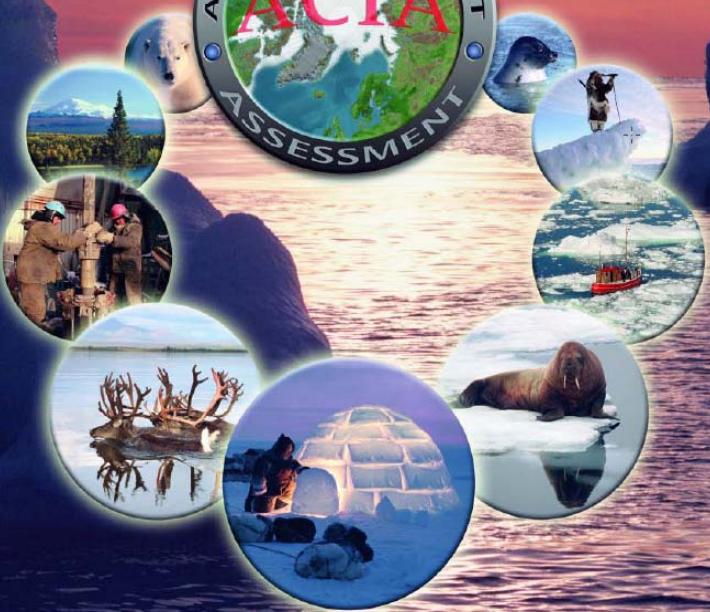
# *Ice thickness is key, but difficult to observe and sample.*



Rothrock et al.: Thinner sea ice in the Arctic

Holloway and Sou: Has Arctic Sea Ice Rapidly Thinned? (2001)

## IMPACTS OF A WARMING ARCTIC



*Satellite data since 1978 show that annual average Arctic sea ice extent has shrunk by 2.7 % per decade, with larger decreases in summer of 7.4% per decade.*

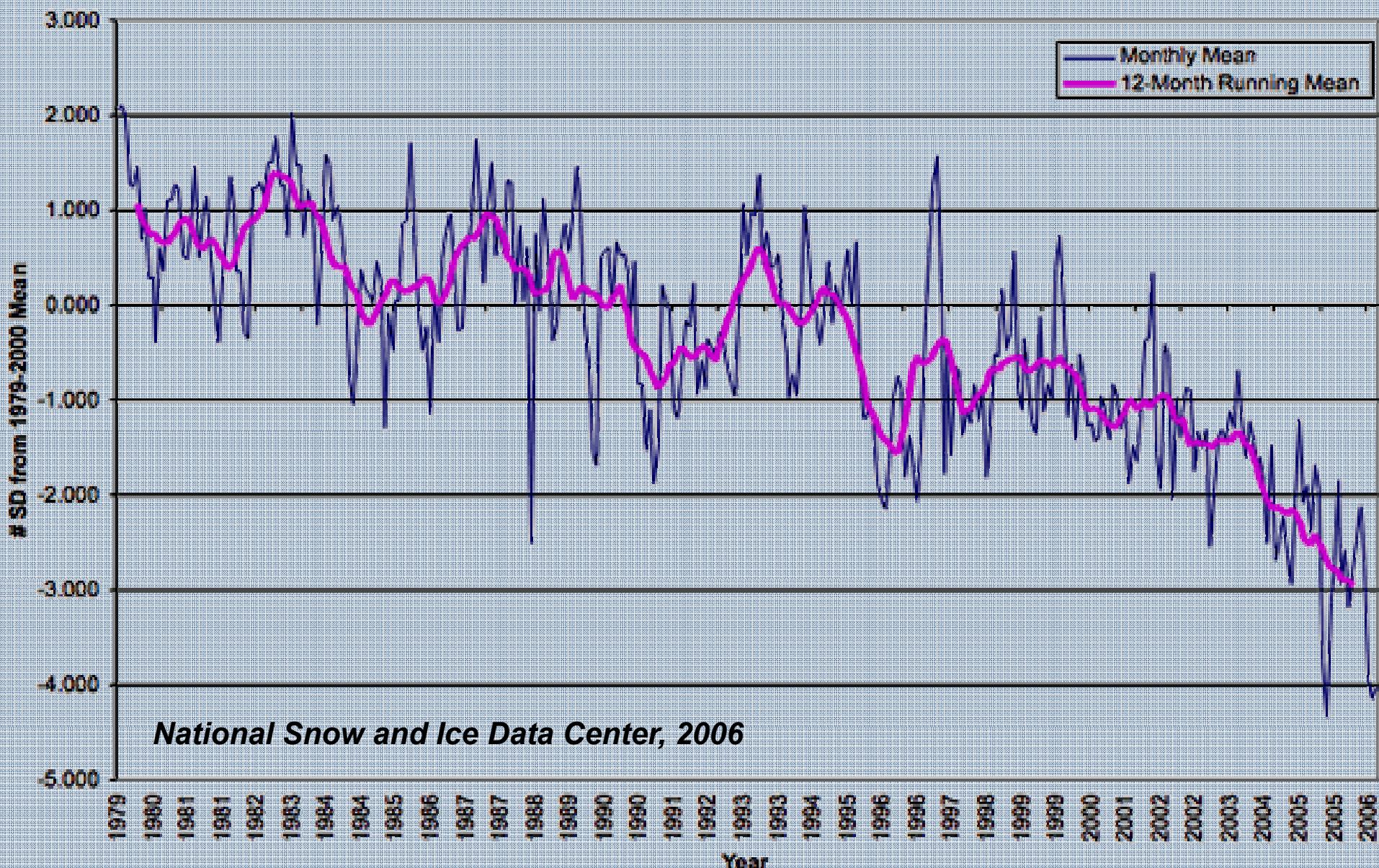
**N. Hemisphere summer ice extent is 21% less than in 1978**

*Sea ice is projected to shrink in both the Arctic and Antarctic under all SRES scenarios. In some projections, Arctic late-summer sea ice disappears almost entirely by the latter part of the 21st century.*

*IPCC 4<sup>th</sup> Assessment Summary Report 2007*

# Observed Arctic Sea Ice Extent 1978-2006

Monthly Mean Anomalies Normalized by Monthly 1979-2000 St. Deviation

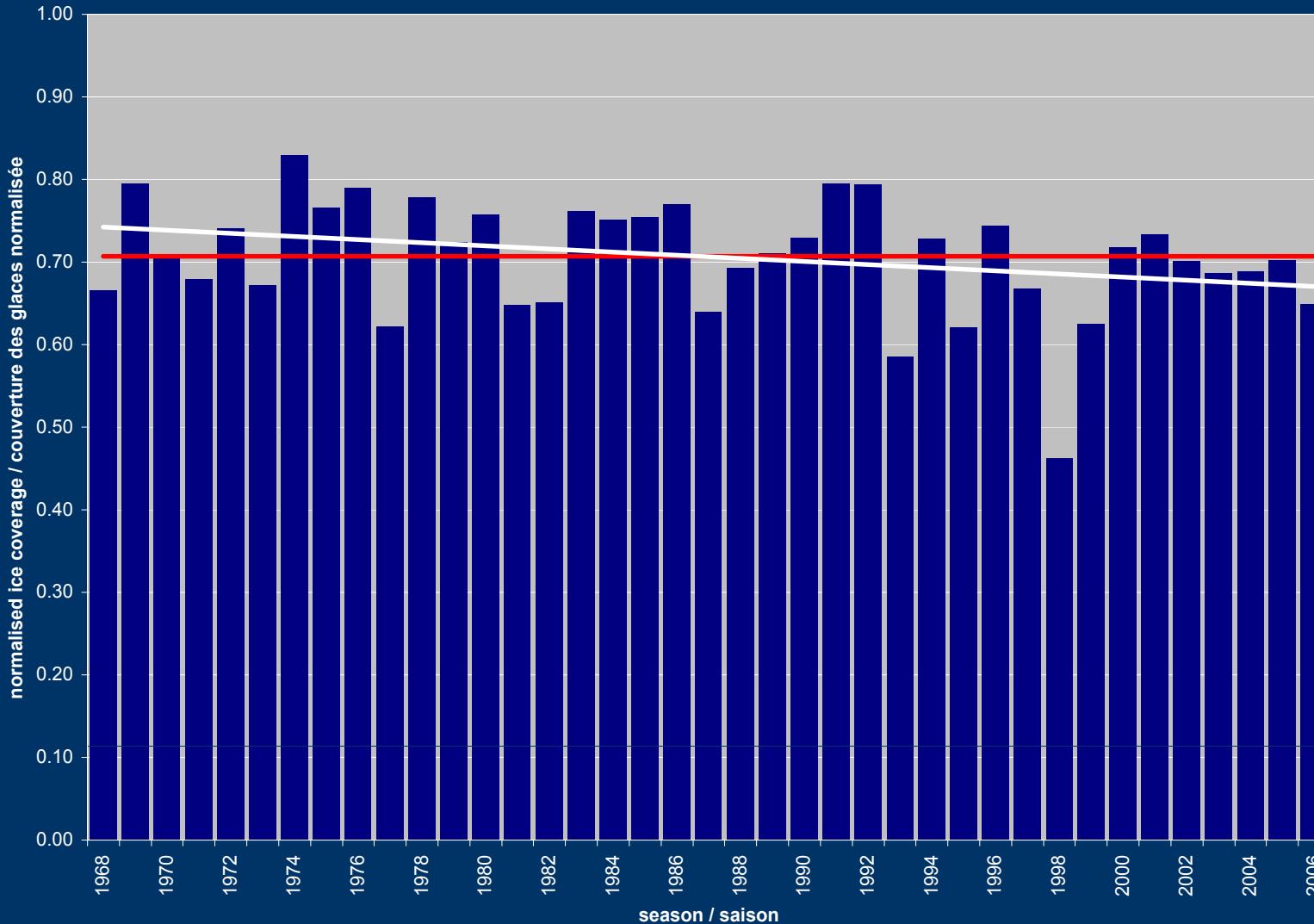


# Western Arctic

10% Decrease over the period 1968-2006

Historical Total Accumulated Ice Coverage 0625 – 1015

Western Arctic / Arctique de l'Ouest



short name / nom en bref:  
WARCTIC

source region / région source:  
WA / AO

ice season (mmdd) / saison  
des glaces (mmdd):  
0625-1015

averages based upon / les  
moyennes basées sur:  
1971-2000

by / par:  
CIS / SCG

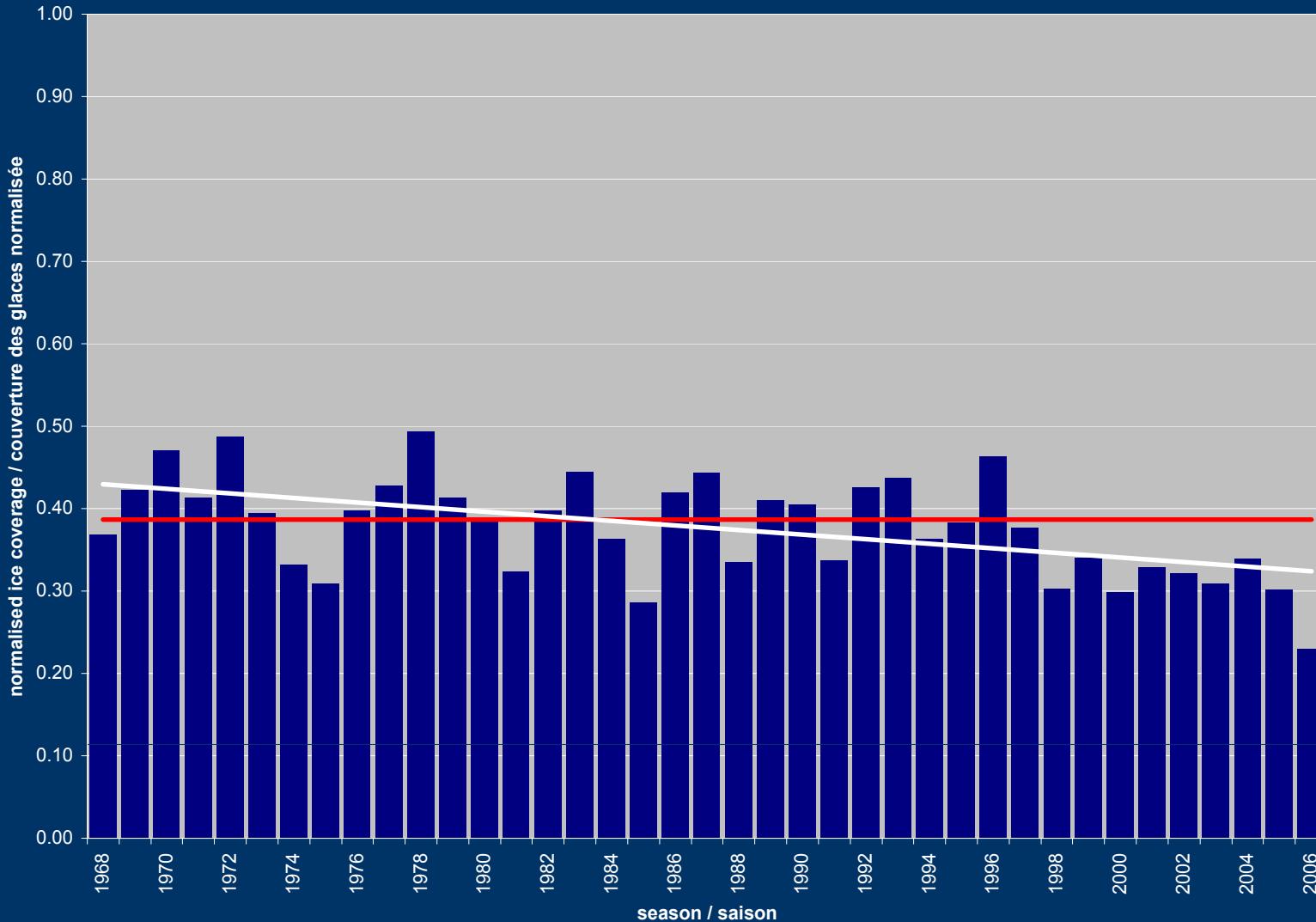


# Eastern Arctic

25% Decrease over the period 1968-2006

Historical Total Accumulated Ice Coverage 0625 – 1015

Eastern Arctic / Arctique de l'Est



short name / nom en bref:  
EARCTIC

source region / région source:  
EA / AE

ice season (mmdd) / saison  
des glaces (mmdd):  
0625-1015

averages based upon / les  
moyennes basées sur:  
1971-2000

by / par:  
CIS / SCG

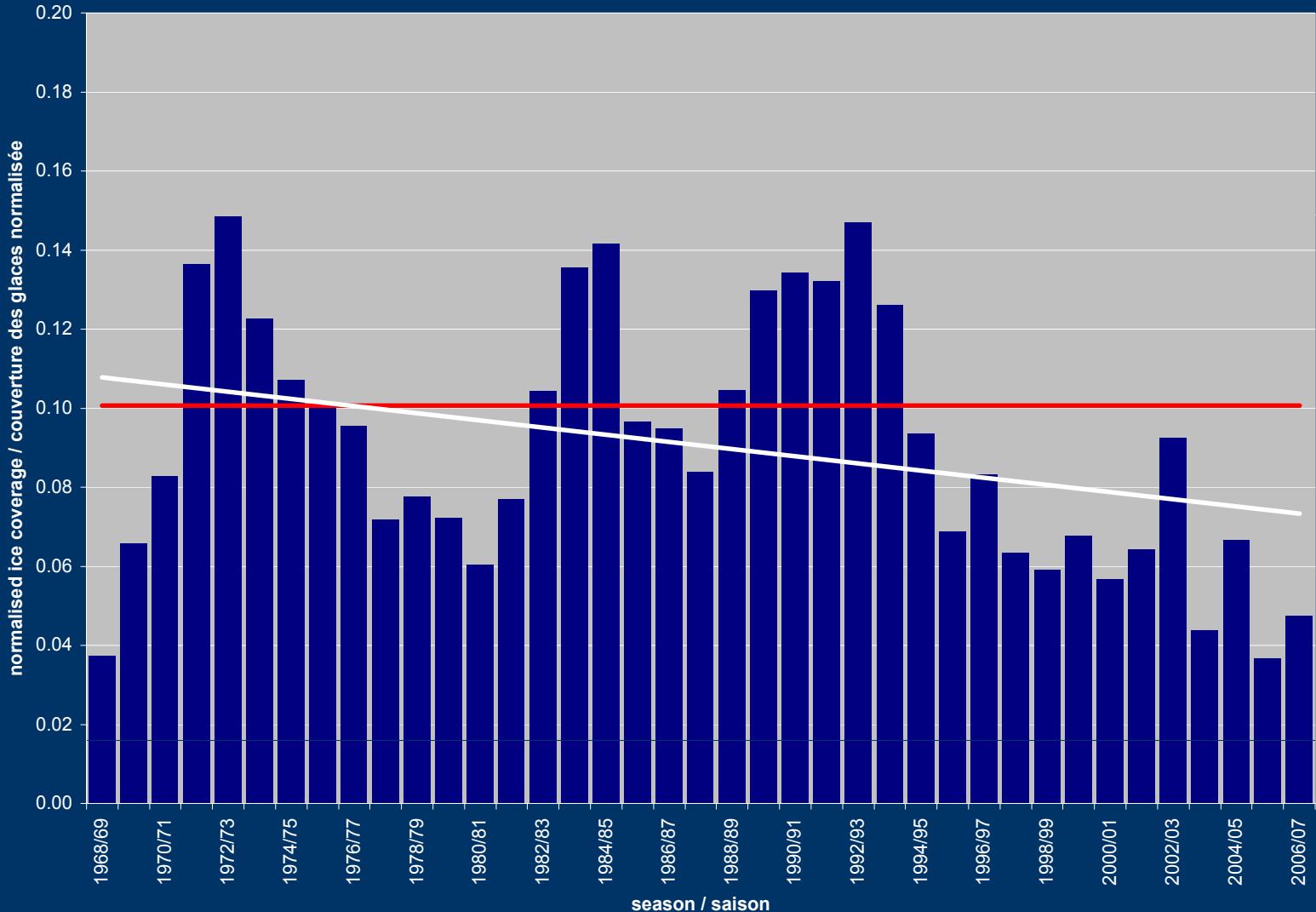


# East Coast

## 31% Decrease over the period 1969-2007

### Historical Total Accumulated Ice Coverage 1126 – 0716

Eastern Coast / Côte Est



short name / nom en bref:  
ECOAST

source region / région source:  
EC / CE

ice season (mmdd) / saison  
des glaces (mmdd):  
1126-0716

averages based upon / les  
moyennes basées sur:  
1970/71-1999/00

by / par:  
CIS / SCG

